CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY AIR RESOURCES BOARD

Proposed Concept Outline for the California Renewable Electricity Standard

Comments of the California Large Energy Consumers Association on the Proposed Renewable Energy Standard Economic Analysis

The California Large Energy Consumers Association appreciates this opportunity to provide comments on the California Air Resources Board's ("CARB's") proposed Renewable Energy Standard ("RES") Economic Analysis. These comments are in response to the PowerPoint presentation regarding economic analysis of a 33% RES presented by the CARB staff at the December 14, 2009 workshop.

At the workshop, CARB indicated that it intends to use the CPUC Energy Division's 33% RPS Calculator for purposes of its own economic analysis of a 33% RES regulation. CLECA is encouraged by the CARB staff's determination to look carefully at the economic effects of a new 33% RES, and by its decision to use the work performed to date by the CPUC and its consultants. CLECA notes that the 33% RPS base case analysis in the RPS Calculator reduces GHG at the cost of \$227/ton, which indicates that a major increase in renewable electricity appears to be a very expensive approach to GHG reduction. For this reason, CLECA is encouraged that CARB is considering the cost of GHG reduction through renewable energy, in addition to the cost of electricity as a metric for evaluating its 33% RES policy. We would encourage CARB to determine if there are other GHG mitigation strategies that would produce less GHG at a lower cost.

Since CARB intends to use the Energy Division's 33% RPS Calculator, we would like to point out a couple of assumptions in the model that have an affect on the forecast of rate increases associated with higher levels of renewable energy.

First, the RPS Calculator compares a forecast of the increase in rates associated with 20% RPS to an increase associated with 33% RPS. It only calculates the increase in rates compared to current rate levels under both policies with certain built-in assumptions that we believe understate the overall impact on rates of these policies. Since CARB is responsible for looking into the economic impact of a 33% RES policy, the total rate increase associated with such a policy and its impact on consumers is an important value to develop and assess.

Second, the RPS Calculator assumes that revenue from the sale of GHG allowances will be used to offset rate increases associated with the increased use of renewable generation. While this assumption does not affect the difference between the rate impacts of 20% RPS vs. 33% RPS, it does result in a reduced forecast of the policies' total anticipated rate impacts on individual customers and on customers generally. This assumption is not based on any policy decisions to date. Indeed, no policy has yet been adopted by CARB or any other state agency as to the use of revenues from sale of allowances (aka offsets). It is entirely possible that any revenues from such sales would be siphoned off for use in reducing the State's general fund deficit, or that they might be utilized to fund new energy efficiency, grid modernization or renewable efforts. It is not at all clear that they will be used to offset customers' rate increases. Thus, for example, the RPS Calculator's determination of an increase in rates of roughly 28% over 2008 levels associated with a 33% RPS policy is very likely understated by a significant amount due to this offset assumption.

Indeed, this assumption is inconsistent with the proposals of CARB's Economic and Allocation Advisory Committee ("EAAC"). The EAAC's proposals indicate a

preference for passing the entire cost impact of GHG mitigation through in electric rates in order to reduce electricity consumption (with some mitigation only for low-income residential consumers via a means other than reduced electric rates). Thus, CARB should, at a minimum, analyze the total rate impact of a scenario that includes *no* offset of electric rate increases through revenues from sale of allowances. In addition, any assumption regarding the use of revenues from sale of allowances must include a value associated with such allowances. We cannot currently know the market value of such allowances when the market begins. However, we do know that in the RPS Calculator, E3 used the 2009 MPR value for CO2 allowances, which was \$31.57/ton in 2008 dollars. Thus, any analysis of the impact of such offset of rate increases that might be provided through revenues from sale of allowances must be explicit regarding the assumed market value of the allowances, the aggregate revenue from such allowances, and perhaps perform a sensitivity analysis on the results by varying the assumptions.

Third, CARB has indicated that it proposes to consider the ratepayer impacts of RES only on residential and small business customers. Since CARB is responsible for studying the impact of its AB 32 implementation strategies on the state as a whole, CLECA suggests that this limitation is unjustified and inappropriate, and is likely to understate the impact of any policy. Residential rates for the first two tiers of usage are capped at well below the cost of serving these customers and impacts on both residential and small business customers will vary widely depending on their usage patterns.

Furthermore, there will be substantial impacts on other types of customers in California, including the large industrial and agricultural sectors, all of which represent important parts of the state's economy. The methodology for allocation of the costs of GHG mitigation, and 33% RES in particular, to the several groups of electric customers has not been determined. If they were to be recovered on a volumetric basis, high load factor customers (primarily large industrial customers) would face the largest burden. An

economic analysis that only focuses on the smallest customers would entirely miss this impact. CLECA suggests that CARB's economic analysis include the impact on a utility's system average rate, which is the aggregate cost of power divided by all sales, as well as sector-specific impacts.

Fourth, if a 33% RES program is based on the percentage of kWh sold by a service provider, the number of these kWh will depend on the success of policies that are intended to reduce the number of kWh purchased. These policies include energy efficiency ("EE"), distributed generation ("DG") such as CSI, and combined heat and power ("CHP"). Such policies have been adopted as part of the AB 32 Scoping Plan to reduce GHG emissions. Any economic analysis performed by CARB should assess the impact of successful implementation of such policies on the RES. Furthermore, the impact of additional DG or CHP on GHG emissions will depend on estimation of which resources are displaced. This is not a trivial undertaking. We have reason to believe that the analysis of the cost of CHP in the CPUC Energy Division's GHG Calculator addresses the GHG output associated with thermal vs. electrical output in a manner that attributes too much GHG to electricity output and makes problematic assumptions regarding the relationship between thermal and electric output. This matter is currently under discussion with the vendor. While we understand that CARB intends to use the RPS Calculator and not the GHG calculator, it is important that the assumptions about the consequences of increased CHP be assessed as accurately as possible, in this case because they will have an impact on the emissions profile and cost of the entire system.

CLECA intends to participate actively in CARB's RES analysis as it has done in the CPUC's RPS analysis. Our goal is a state policy to reduce GHG in the most costeffective manner with sensitivity to the impact of the costs of any reduction strategy on all sectors of the state's economy. CLECA appreciates this opportunity to provide its comments on CARB's proposed approach to economic analysis of the RES. We will continue to participate fully in the development process in the interest of seeking the most cost-effective means of meeting GHG mitigation and RES compliance goals.

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Respectfully submitted,

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